

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 03/03209

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16K11/044 F16K31/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F16K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 548 877 A (AUMAYER HANSRUEDI) 22 December 1970 (1970-12-22) column 1, line 65 -column 4, line 15 figures 2,7 ---	1-11
X	GB 2 056 627 A (CROSWELLER & CO LTD W) 18 March 1981 (1981-03-18) abstract; figures 2,4 ---	1,2,6-8, 10,11
X	US 3 818 941 A (MARON E) 25 June 1974 (1974-06-25) column 3, line 42 -column 3, line 65 figure 1 ---	1,2,7-11
X	US 4 917 150 A (KOCH ROBERT O ET AL) 17 April 1990 (1990-04-17) column 5, line 7 -column 5, line 38 figure 1 --- -/--	1,2,7-11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

22 October 2003

Date of mailing of the international search report

04/11/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 211 198 A (TINHOLT THOMAS) 18 May 1993 (1993-05-18) abstract; figure 3 ---	1-8, 10, 11
A	US 5 064 166 A (SCHECHTER MICHAEL M) 12 November 1991 (1991-11-12) abstract; figures 1, 2 -----	1, 2, 10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 03/03209

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3548877	A	22-12-1970	NONE	
GB 2056627	A	18-03-1981	DE 3030167 A1 FR 2463343 A1 IT 1132391 B JP 56073533 A SE 439354 B SE 8005532 A	12-03-1981 20-02-1981 02-07-1986 18-06-1981 10-06-1985 15-02-1981
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US 4917150	A	17-04-1990	NONE	
US 5211198	A	18-05-1993	NONE	
US 5064166	A	12-11-1991	NONE	